

AMENDMENT

Kindly amend the application as follows.

In the Title:

Replace the title with the following new title: --RECOMBINANT SENDAI VIRUS VECTOR INCLUDING A GENE ENCODING A CHEMOKINE--.

In the Specification:

Amend the paragraph beginning at page 3, line 20, as follows.

Figure 1 shows construction of the plasmids pSeV/SDF-1 α (-) and pSeV/SDF-1 β (+) (SEQ ID NO:3) which generate recombinant SeV/SDF-1 α and SeV/SDF-1 β antigenomic RNAs, respectively. pT7 stands for the T7 promoter; N, P, M, F, HN, and L for Sendai virus structural genes N, P, M, F, HN, and L, respectively; Rbz for the hepatitis delta virus ribozyme; E for the stop signal; and S for the restart signal.

Amend the paragraph beginning at page 10, line 34, as follows.

Western blot was performed as follows. Culture supernatants of infected cells were first electrophoresed in 15% SDS-polyacrylamide gels (Laemmli, U.K. (1970) Nature 227, 680-685). The proteins in the gels were electrotransferred onto PVDF

membranes (Millipore) and probed with anti-SDF-1 antiserum, which was prepared by immunized rabbits with multiple antigen peptide containing residues 33-45 (RFFESHVARANVK; SEQ ID NO:1) synthesized by Research ~~Beneties~~ Genetics Inc. As control, culture supernatants of wild-type Sendai virus infected cells were used. The SDF-1 α transcript was absent in wild-type Sendai Virus infected fluid, and reacted specifically with rabbit serum immunized with 13-mer peptides derived from human SDF-1 α sequence.

Amend the paragraph beginning at page 11, line 24, as follows.

Amino acid sequencing was performed for the purified SDF-1 α , demonstrating the NH₂-terminal KPVSLSYRXPXR (SEQ ID NO:2), identical to the reported sequence of SDF-1 α . In this NH₂-terminal peptide, X should be read as C, because it cannot be resolved by the sequencing method employed.

In the Claims:

Amend claims 1-3, 6-8, 10-12, and 14-23 as follows.

Claim 1. (Currently Amended) A recombinant Sendai virus vector comprising a gene encoding a chemokine, wherein said vector, when transfected to a host, expressing expresses the chemokine in a soluble and biologically active chemokine form.

Claim 2. (Currently Amended) The recombinant Sendai virus vector of claim 1, wherein said chemokine is ~~soluble and biologically active~~ CXC-chemokine.

Claim 3. (Currently Amended) The recombinant Sendai virus vector of claim 2, wherein said CXC-chemokine is ~~soluble and biologically active~~ stromal cell-derived factor α or stromal cell-derived factor β .

Claim 4. (Original) The recombinant Sendai virus vector of claim 3, wherein said vector is disseminative.

Claim 5. (Original) The recombinant Sendai virus vector of claim 3, wherein said vector is infectious and replicates autonomously, but is not disseminative.

Claim 6. (Currently Amended) A method of producing a ~~soluble and~~ biologically active chemokine which comprises the steps of: inserting at least one chemokine gene into a Sendai virus vector, introducing said vector into a host cell, allowing the ~~vector~~ host to produce said chemokine, and recovering said chemokine from the culture supernatant.

Claim 7. (Currently Amended) The method of claim 6, wherein said chemokine is

~~soluble and biologically active~~ CXC-chemokine.

Claim 8. (Currently Amended) The method of claim 6, wherein said host cell expresses Sendai virus virions and the step of recovering said chemokine from the culture supernatant ~~comprises~~ includes the step of removing virions by centrifugation.

Claim 9. (Cancelled)

Claim 10. (Currently Amended) A method of treating human immunodeficiency virus infection, which comprises collecting target cells from human subjects, infecting the cells with a recombinant Sendai virus vector expressing a ~~soluble and biologically active~~ CXC-chemokine, and returning the infected cells to the human subjects.

Claim 11. (Currently Amended) A pharmaceutical composition comprising a recombinant Sendai virus vector comprising a gene encoding a stromal cell-derived factor chemokine, wherein said vector, when transfected to a host, expresses ~~expressing a~~ ~~soluble and biologically active~~ stromal cell-derived factor α or biologically active stromal cell-derived factor β and a pharmaceutically acceptable carrier, wherein said vector is disseminative.

Claim 12. (Currently Amended) A pharmaceutical composition comprising a recombinant Sendai virus vector comprising a gene encoding a stromal cell-derived factor chemokine, wherein said vector, when transfected to a host, expresses ~~expressing a~~ ~~soluble and biologically active~~ stromal cell-derived factor α or biologically active stromal cell-derived factor β and a pharmaceutically acceptable carrier, wherein said vector is infectious and replicates autonomously, but is not disseminative.

Claim 13. (Cancelled)

Claim 14. (Currently Amended) A host cell transfected with a recombinant Sendai virus vector expressing a ~~soluble and~~ biologically active chemokine.

Claim 15. (Currently Amended) A method of inhibiting proliferation of HIV-infected cells *in vitro* which comprises, incubating the host cell of claim 14 *in vitro* under conditions that allow for a secretion of ~~soluble and~~ biologically active chemokine; and contacting said chemokine with cells that are infected with HIV, ~~thereby~~ wherein said chemokine inhibits ~~inhibiting~~ proliferation of HIV-infected cells *in vitro*.

Claim 16. (Currently Amended) The method of claim 7, wherein said CXC-chemokine is ~~soluble~~ and biologically active stromal cell-derived factor α or biologically active stromal cell-derived factor β .

Claim 17. (Currently Amended) The method of claim 7, wherein said host cell expresses Sendai virus virions and the step of recovering comprises the step of removing virions by centrifugation.

Claim 18. (Currently Amended) The method of claim 16, wherein said host cell expresses Sendai virus virions and the step of recovering comprises the step of removing virions by centrifugation.

Claim 19. (Currently Amended) The method of claim 10, wherein said CXC-chemokine is ~~soluble and~~ biologically active stromal cell-derived factor α or ~~(soluble and)~~ biologically active stromal cell-derived factor β .

Claim 20. (Currently Amended) The host of claim 14, wherein said chemokine is ~~soluble and~~ biologically active CXC-chemokine.

Claim 21. (Currently Amended) The host of claim 20, wherein said CXC-chemokine is ~~soluble and~~ biologically active stromal cell-derived factor α or biologically active stromal cell-derived factor β .

Claim 22. (Currently Amended) A method of inhibiting proliferation of HIV-infected cells *in vitro* which comprises, incubating the host cell of claim 20 *in vitro* under conditions that allow for secretion of ~~soluble and~~ biologically active CXC-chemokine; and contacting said CXC-chemokine with cells that are infected with HIV, ~~thereby~~ wherein said CXC-chemokine inhibiting inhibits proliferation of HIV-infected cells *in vitro*.

Claim 23. (Currently Amended) A method of inhibiting proliferation of HIV-infected cells *in vitro* which comprises, incubating the host cell of claim 21 *in vitro* under conditions that allow for secretion of ~~soluble and~~ biologically active stromal cell-derived factor α or stromal cell-derived factor β and contacting said stromal cell-derived factor α or stromal cell-derived β with the cells that are infected with HIV, ~~thereby~~ wherein said CXC-chemokine inhibiting inhibits proliferation of HIV-infected cells *in vitro*.